



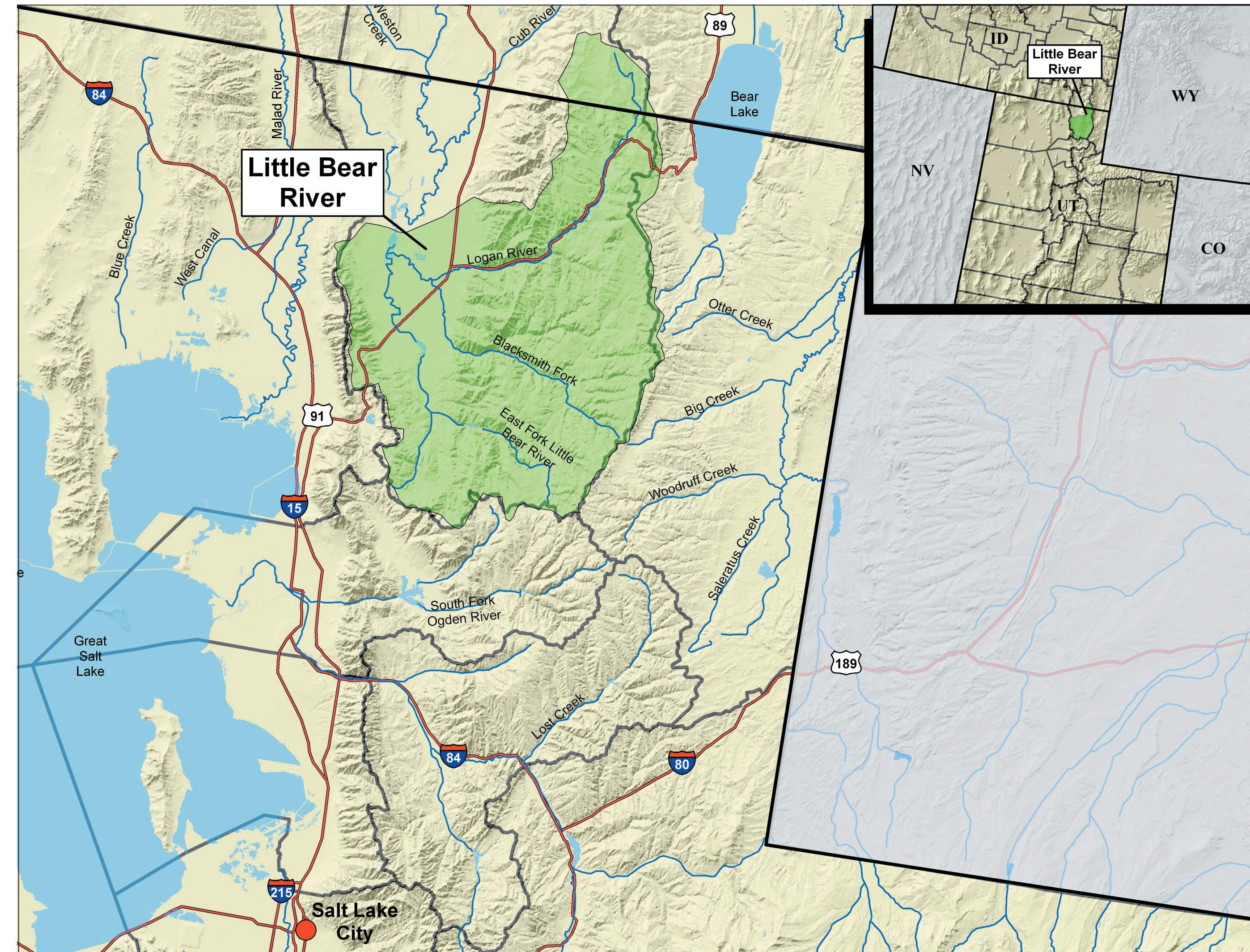
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Little Bear River Watershed, Utah: 2005-2007



A CSREES* Competitive Grant Watershed, one of 24 CEAP watershed projects.



Approach

Water sampling: Phosphorus, sediment, flow, and turbidity

Watershed models: PSIAC (Pacific Southwest Inter-Agency Committee), AGNPS (Agricultural Nonpoint Source Pollution Model), and EPIC (Erosion/Productivity Impact Calculator)

Socio-economic study: Interview farmers to find out if the conservation practices changed their farming techniques.

Communicating Results

Three annual progress reports; information to farmers and general public throughout project and in final report on findings.

Collaborators

- Utah State University Colleges of Engineering, Natural Resources, Humanities, Arts and Social Sciences, and Agriculture
- Utah State University Extension
- Utah State University Water Research Lab
- USDA Natural Resources Conservation Service
- Farmers, ranchers
- Utah Division of Water Quality

Contacts

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CEAP Assessment

Determine whether conservation practices implemented since 1990 have reduced phosphorus levels.

Watershed Description

- 182,858 acres.
- Approximately 50 dairy farms.
- 70% range and forest lands, 26% crop land.
- A Total Maximum Daily Load (TMDL) limit was established for phosphorus.
- Watershed is a Clean Water Act Section 319 grant demonstration and monitoring project.

Issues: Historically high phosphorus and sediment concentrations in river attributed mainly to agriculture.

*Cooperative State Research, Education, and Extension Service



Typical pasture land in the Little Bear River Watershed.



Utah Water Research Laboratory researcher Jeff Horsburgh making a water quality measurement in the South Fork of the Little Bear River.



Jeff Horsburgh making a water quality measurement in the Little Bear River during spring runoff conditions.

Timeline

2003

Initial funding

2004

August CEAP bibliographies

2005

May Wetlands peer review

July Wildlife literature review (program-based)

October

Cropland literature reviews
Wildlife literature review (practice-based)
Wildlife Work Plan

November

Wetlands Work Plan

December

Draft findings—
Prairie Pothole region

2006

February

Preliminary habitat quality models—
Prairie Potholes wetland region

March

Preliminary National Assessment Report

2007

Fall

National Assessment Final Report

2008

January

CSREES Watershed final reports